Exemption No. 7573

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98055-4056

In the matter of the petition of

BF Goodrich Aerospace

for an exemption from § 25.813(e) of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2001-9346

GRANT OF EXEMPTION

By letter DAS9-481-WES, dated April 2, 2001, Mr. John Miller, DAS Lead Administrator, BF Goodrich Aerospace, Aviation Services Division, 3100 112th Street SW., Everett, Washington 98204-3500, petitioned for an exemption from the requirements of § 25.813 (e) of Title 14, Code of Federal Regulations (14 CFR). The petitioner has requested the exemption in order to permit the installation of interior doors between passenger compartments on the Bombardier Global Express airplane, Model BD-700-1A10.

The petitioner requests relief from the following regulation:

Section 25.813(e) - prohibits the installation of doors between passenger compartments.

The petitioner's supportive information is as follows:

"Relief is sought from the requirement of FAR 25.813(e) to allow BF Goodrich Aerospace to install sliding 'pocket' doors in cabin partitions which allow sections of the cabin to be closed off in flight for privacy. The exemption would be applicable to all Bombardier BD-700-1A10 airplanes modified by BF Goodrich Aerospace.

ANM-01-341-E

"Supporting information:

"The requested exemption is equivalent to Exemption 7259 granted to Bombardier Aerospace on June 29, 2000.

"The BD-700-1A10 airplane is designed to the requirements of FAR Part 25, for Transport Category. The passenger compartment requirements of FAR Part 25 are primarily intended to apply to Transport Category airplanes used for the carriage of fare paying passengers whereas the BD-700-1A10 airplane is type certified for a maximum of 19 passengers and is usually equipped for private or corporate use. The differences between commercial transport category airplanes and corporate or privately owned airplanes are not reflected in the FAR Part 25 rules. BF Goodrich Aerospace contends that airplanes specifically designed for corporate or private service under FAR Part 91 rules should be eligible for exemption from certain FAR Part 25 cabin regulations, to allow installation of certain non-compliant features and facilities, provided an acceptable level of safety can be demonstrated. The cabin of the BD-700-1A10 is approximately 8 feet wide. In order to provide a private area in the cabin, it is necessary to install a full-width partition because a side corridor is impractical. The sliding pocket doors are installed in a partition on one side of the airplane, and retract into the partition. The doors have an articulating lower section to allow them to retract into the partition to match the fuselage contour. The door also has blowout panels which operate to reduce compartment pressure differentials in the event of a rapid decompression when the door is closed.

"Airplanes specifically designed and outfitted for corporate or private operation generally carry passengers familiar with flying and with the specific airplanes in which they travel. These airplanes are generally operated exclusively by one crew who are very familiar with the specific airplane. Unlike an airliner, the crews of corporate airplanes have frequent contact with many of their passengers which promotes positive safety communication. Also, when a partition is installed, it is not possible to accommodate more than 15 passenger seats, because of the limitations inherent in full compliance with FAR 25.562. This in itself is a compensating factor. The combination of these features of corporate or private operation provides a level of safety awareness which is not achievable in commercial operations. In addition, as stated above, mechanical features will be incorporated into the door design to provide an acceptable level of safety for the occupants of airplanes with divided passenger seating areas.

"The following safety features will be incorporated into the design and operation of the partition doors:

"[1.] The airplane will not be operated for hire or for common carriage.

"[2.] The doors are frangible, enabling a door to be broken open in the event it becomes jammed in the closed position.

"[3.] Placards will be installed which require the sliding pocket doors to be latched open for taxi, take-off and landing.

"[4.] The doors will be equipped with two independent locking devices to ensure that they remain open in the event of an emergency landing. Either device will be capable of supporting the emergency landing inertia loads of FAR 25.561.

"[5.] An amber 'door closed' advisory light will be installed in a flight deck instrument panel to indicate if a partition door is closed during taxi, take-off, or landing. Operating procedures will be provided to ensure that taxi, take-off and landing are prohibited when a compartment is occupied and the door is closed. The light will not illuminate when the landing gear is retracted.

"[6.] Emergency exit sign requirements will be addressed separately for each individual interior arrangement, to ensure compliance with FAR 25.811.

"[7.] The right side emergency exit is located between stations 622 and 642 and the left side door is located between stations 310 and 347. For cabin partition doors forward of station 622 it will be possible for persons forward or aft of a locked door to unlock or unlatch the door without the use of tools. For doors aft of station 642 it will be possible for persons aft of a locked door to unlock or unlatch the door without the use of tools.

"[8.] The Passenger Information Card (PIC) will contain a section describing the action of the doors, the emergency features of the doors, and instructions for latching the doors open for taxi, take-off and landing. Each passenger will be informed that the airplane does not fully comply with the occupant safety requirements.

"The effect of the safety features described above is to ensure that there is always a clear path through a partition to an emergency exit. However, even if some extreme condition should result in a door being closed or partially closed after an accident, there are still simple means to get through the door to reach an exit. The frangibility feature of the door was demonstrated by Bombardier in support of the reference exemption. A 5-percentile female broke through the closed door and a 95-percentile male was able to pass through the resulting aperture. The basic issues of a passenger finding and reaching an exit in an emergency are addressed by the above features and the natural safety parameters inherent in corporate operation; therefore it is argued that the exemption as requested would provide an acceptable level of safety for the passengers.

"Public Interest:

"BF Goodrich Aerospace Designated Alteration Station provides STC interior reconfigurations for a wide range of transport category airplanes to an international market.

An increasing number of transport category airplanes are entering corporate service and BFG wishes to expand into this market by providing completion center services for these airplanes. It is in the public interest to keep this work in the USA. In addition to the two airplanes currently in work, BF Goodrich Aerospace expects to be contracted to install similar corporate executive interiors in more airplanes of this type. This represents an expansion of the company's business and will provide additional job opportunities. The exemption would apply only to corporate or privately owned airplanes operated under FAR Part 91 rules.

"An increasing number of prospective operators of corporate airplanes are requesting private areas in their cabins. They compare the BD-700-1A10 with the products of other foreign airplane manufacturers who are able to offer this feature and this differential creates an unfair competitive edge in this market. The exemption as proposed allows provision of a feature attractive to prospective purchasers while at the same time achieving an acceptable level of safety."

Notice and Public Procedure Provided

On May 29, 2001 (66 FR 29202), the FAA published notice of the petition for exemption in the Federal Register and requested comments from the public. No comments were received in response to the notice.

FAA's Analysis of the Petition

As noted by the petitioner, there are differences between commercial and private use operation (whether by an individual or a corporation) of transport category airplanes that warrant consideration of the appropriate level of safety that is warranted. The FAA is giving great attention to the issues raised when these airplanes are operated in private use. In recognizing the differences between commercial and private use operations, the FAA has identified several regulatory requirements, including the subject of this petition, that may need to be revised to address the safety issues revealed by these differences. The FAA is currently reviewing the adequacy of the current regulations and in the future may propose revisions to the requirements, where appropriate.

The current regulations allow the installation of interior doors, provided that passengers cannot be seated on both sides of the door during takeoff and landing. The FAA has safety concerns regarding doors that are located between passengers and exits. The FAA has proposed to prohibit such installations in future designs, as detailed in Notice of Proposed Rulemaking 96-9 (61 FR 38551, July 24, 1996). However, until the regulations are revised, such doors may continue to be installed without the need to process a petition for exemption. Additionally, the FAA has recently issued exemptions for private use airplanes that would permit installation of doors between passenger compartments, provided that

certain limitations are met. The petitioner has proposed these limitations as part of this petition.

With regard to the consideration of public use vs. private use operations, it is understood that although some persons may be frequent passengers on private-use airplanes, some of these passengers will be unfamiliar with their operation and with differences with commercial passenger operations. These persons will not ordinarily be aware of any grants of exemption issued by the FAA, and might assume that these private-use airplanes are effectively equivalent to airplanes used by a commercial operator. For this reason, the FAA considers that it is necessary for each passenger to be made aware that the particular airplane differs from the occupant safety standards mandated for the airplane type in general. The FAA will allow each operator to determine how best to accomplish this notification, but will require as a condition of this exemption that procedures be developed whereby each passenger is so informed, prior to flying on the airplane for the first time. The notification to any individual need only be accomplished once.

Although this grant of exemption clearly benefits the petitioner as a private entity, with the traveling public excluded from any apparent direct benefit, the FAA considers that the public at large does have a potential to benefit, by granting increased flexibility to the manufacturer and modification of airplanes for private use. The FAA agrees that there is an economic benefit to US entities by virtue of this grant. This will, in turn, benefit the public at large for the reasons noted by the petitioner. Since the grant of exemption will not have detrimental safety implications on the public at large, the FAA finds that the economic benefits constitute sufficient public interest.

While this grant of exemption cannot be said to provide the same level of safety that would be afforded were there strict compliance with the regulations, the resultant level of safety is consistent with other private use airplanes. In addition, the level of safety that results from this exemption is specifically requested and desired by that segment of the public, namely the owners, that will fly on these airplanes. The FAA also notes that no other parties have expressed an interest in this petition.

After considerable deliberation, the FAA has concluded that the installation of interior doors, with certain limitations, can be accepted. In order to maximize the level of safety, the FAA will require that certain limitations be made mandatory to permit such installations. As noted previously, there are precedents for this decision involving other private use airplanes.

Finally, regarding the type of operation permitted under the terms of this exemption, it should be noted that, whether or not operations are scheduled, this exemption does not permit fares to be collected in exchange for transportation. It is also the intent of this exemption that the airplane is not used to transport the general public (common carriage) even if fares are not collected. This exemption does not restrict one party from collecting

fees from another party, as long as the airplane is operated for private use. That is, the airplane's owner may lease the airplane to another party, who in turn operates the airplane.

The Grant of Exemption

In consideration of the foregoing, I find that a grant of exemption is in the pubic interest and will not adversely affect the level of safety provided by the regulations. Therefore, pursuant to the authority contained in 49 U.S.C. 40113 and 44701, delegated to me by the Administrator, BF Goodrich Aerospace is hereby granted an exemption from § 25.813(e). This exemption is granted to the extent necessary to allow installation of interior doors between passenger compartments on the BD-700-1A10 airplane, and is subject to the following provisions:

1. The airplane is not operated for hire or offered for common carriage. This provision does not preclude the operator from receiving remuneration to the extent consistent with 14 CFR part 125 and 14 CFR part 91, subpart F, as applicable.

2. Each door between passenger compartments must be frangible.

3. Each door between passenger compartments must have a means to signal to the flight crew when the door is closed. Appropriate procedures/limitations must be established to ensure that takeoff and landing is prohibited when any such door is not in the proper takeoff and landing configuration.

4. Each door between passenger compartments must have dual means to retain it in the open position, each of which must be capable of reacting the inertia loads specified in 14 CFR § 25.561.

5. Doors installed across a longitudinal aisle must translate laterally to open and close.

6. When doors are installed in specified egress paths, each passenger must be informed that the airplane does not comply with the occupant safety requirements mandated for the airplane type in general. This notification is only required the first time that a person is a passenger on the airplane.

7. When doors are installed aft of station 642.1, it must be possible for persons aft of the door to unlock or unlatch the door, without the use of tools. When doors are installed forward of station 622.1, it must be possible for persons forward or aft of the door to unlock or unlatch the door, without the use of tools.

Issued in Renton, Washington, on July 20, 2001.

/s/ Ali Bahrami
Acting Manager, Transport Airplane Directorate
Aircraft Certification Service